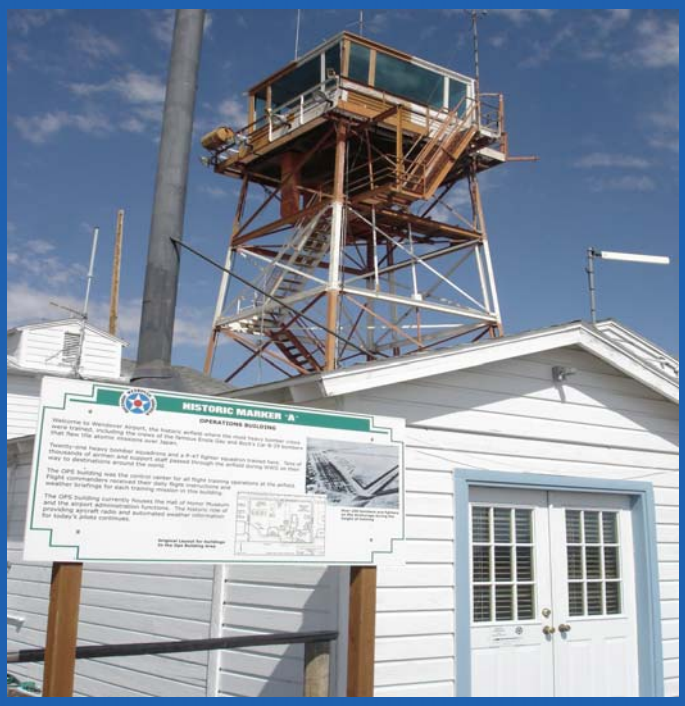
Wendover City
Community Transportation Plan



Final Report • September 22, 2006

Wendover City
Community Transportation Plan

Mayor	**Brett Shelton**
City Council	**Karl Jorgensen** **Mike Crawford** **Gertrude Tripp** **Stephen Lawrence** **Gary Bean**
Chief of Police	**Vaughn Tripp**
City Administrator	**Glenn Wadsworth**
Utility Supervisor	**Armando Rodriguez**

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1. Introduction

1.1. Background

When Wendover, Utah was incorporated on 25 October 1950 with 149 qualified electors and a population of more than 400, it was a far cry from the watering stop established by the Western Pacific Railroad in 1907. One hundred twenty miles from Salt Lake City at the western edge of the Great Salt Lake Desert, Wendover became a crew change, locomotive servicing, and division point for the WP. The community may have been named for a surveyor employed by the railroad, Charles Wendover.

The city lies on an ancient beach of Lake Bonneville, and is snuggled against the Leppy Range, which rises 5,000 feet up from the desert floor. To the northwest is the 10,704-foot Pilot Peak; and the 12,000 foot Goshute and Deep Creek Ranges lie to the south.

In 1845 Captain John C. Fremont passed north of Wendover surveying the country. After crossing the Great Salt Lake Desert, his party stopped at the springs of Pilot Peak, the beacon mountain he named, then continued west over the Pequop and Toana Ranges.

In order to operate their steam engines, the Western Pacific had piped water twenty-three miles from Pilot Springs northwest of Wendover. When the company began operating diesel-electric locomotives, they sold the water and two sections of ground to the town of Wendover for $90,000. To make the water fit for culinary use, the city has completed a modern water treatment plant. Also, by expanding the pipeline system, more water will be available for business development.

Another source of water for the city is Johnson's Springs, located thirty-two miles away, which was sold to Wendover City July 9, 1976. This water source belonged to Wendover Air Force Base, and along with part of the base itself, was transferred to the city 15 August 1977. This was shortly after the base had been listed on the National Register of Historic Places. Wendover became a city of the third class, based on population, 25 March 1982 with a population of 1,099. By 1990 the population reached 1,626 and the town covered 8.5 square miles. The air base today is undergoing civilian development for commercial flights in support of the gaming industry, which boomed in the 1980s on the Nevada side.

Wendover City is famous for the nearby Bonneville Salt Flats, covering 26,000 acres where world land speed records have been set. The salt flats are also where the crew of the B-29 bomber “Enola Gay” trained before dropping the atom bomb on Japan in 1945.

Wendover, Utah and West Wendover, Nevada share local law enforcement, as police officers can make arrests on either side of the state line. In addition the fighting of fires is a shared concern. The Utah side provides support business like gas stations,

lodging and grocery stores for the gambling resort businesses in Nevada. All proposals to date to legislate casino gambling on the Utah side have died quick deaths.

Located in the arid Great Basin, water is the key to Wendover, and all such communities in this region. Wendover is also a supply center for ranchers, who range thousands of head of sheep and cattle within a fifty-mile radius. Aside from the tourism, employment has been provided for over seventy-five years by the potash industry. In 1988 Kaiser Aluminum and Chemical Corporation sold its plant to Reilly Industries of Indiana, which produces 100,000 tons of fertilizer annually. Recently, this local industry was sold again, this time to Intrepid Wendover Potash.

The city's elevation is 4,230 feet, and the mean monthly temperature of Wendover ranges from a maximum of 79 F. in July to a minimum of 27 F. in January, with an annual precipitation of approximately five inches. High summer temperatures and frequent winds create a large evaporation rate.

A number of religious denominations are represented in Wendover: Catholic, Baptist, Christian Fellowship, and several Latter-Day Saint (Mormon) Branches. An eighty-five foot concrete and steel sculpture "Metaphor -Tree of Utah" by Karl Momen welcomes Wasatch Front visitors approaching the city twenty-six miles away.

In 1971, after a public hearing, design for a section of Interstate 80 was approved which, beginning at the state line and extending east, bypassed Wendover on the north. In 1990, under mayor "Ab" Smith, a ten-acre parcel of land was set aside as the town's first cemetery.

The community of Wendover is served by the Wendover Times and High Desert Advocate newspapers. Wendover was the site of the completion of the first transcontinental telephone line in 1914, and in 1942 an all-weather telephone cable was joined at Wendover.

See: Amy Miller and Orrin Miller, eds., History of Tooele County, Vol. II (1990).

Ouida N. Blanthorn

www.onlineutah.com

Additions made by UDOT and Wendover City staff.

1.2. Study Need

Although currently a small community of population (1,537), Wendover has seen a 36.38% population increase within the last decade (1990-2000). From 1970 to 2000, the population has increased 96.80%. A well-established transportation plan is needed to provide direction for continual maintenance and improvements to Wendover's transportation system.

With the increasing population of Wendover, the need for system improvements and a more extensive transportation plan is necessary for both Wendover and the surrounding area.

Some of the major transportation issues around the State are as follows:

- Safety
- Railroad crossings
- Trails (bicycle, pedestrian, and OHV)
- Signals
- City interchange aesthetics
- Connectivity of roadways
- Property access
- Truck traffic
- Alternate routes
- Speed limits

Wendover recognizes the importance of building and maintaining safe roadways, not only for the vehicle traffic, but also for pedestrians and bicyclists.

1.3. Study Purpose

The purpose of this study is to assist in the development of a transportation plan for Wendover City. Wendover could adopt this plan as a companion document to the City's General Plan. With the transportation plan in place the City may also qualify for grants from the State Quality Growth Commission.

The primary objective of the study is to establish a solid transportation plan to guide future developments and roadway expenditures. The plan includes two major components:

Short-range action plan

Long-range transportation plan

Short-range improvements focus on specific projects to improve deficiencies in the existing transportation system. The long-range plan will identify those projects that require significant advanced planning and funding to implement and are needed to accommodate future traffic demand within the study area.

1.4. Study Area

The study area is Wendover, Utah and land adjacent to it. A general location map is shown in Figure 1-1. A more detailed map of the study area and City limits is shown in Figure 1-2. The roadway network within the study area includes Interstate 80, Utah State Route 58, and other local roads. Each of these roadways provides a vital function to Wendover and to the State of Utah.

I-80 connects all points east and west including Salt Lake City and Elko, Nevada. SR-58 is the main street through Wendover and serves as a business loop for the area.

Figure 1-1. Study Area Map

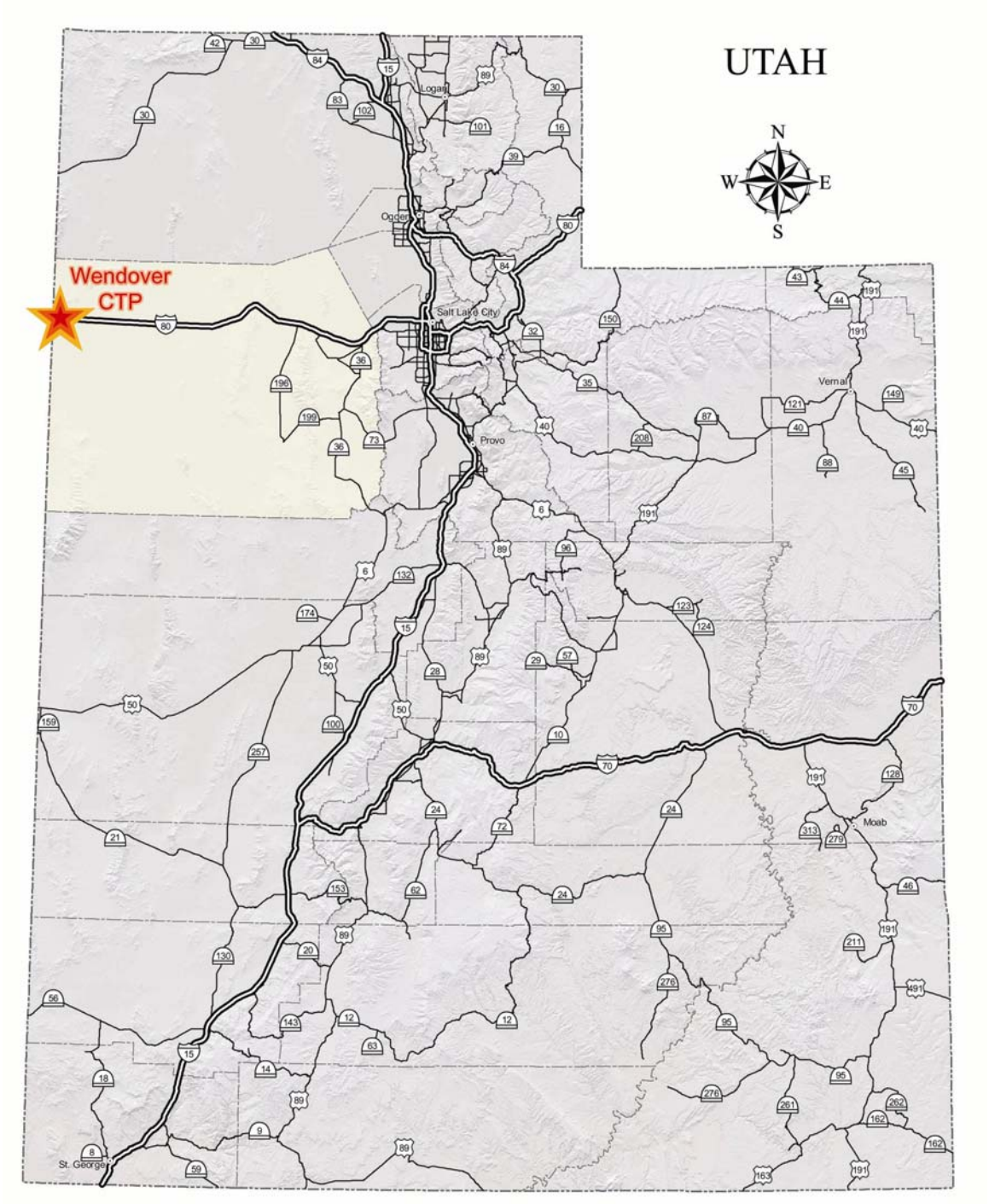
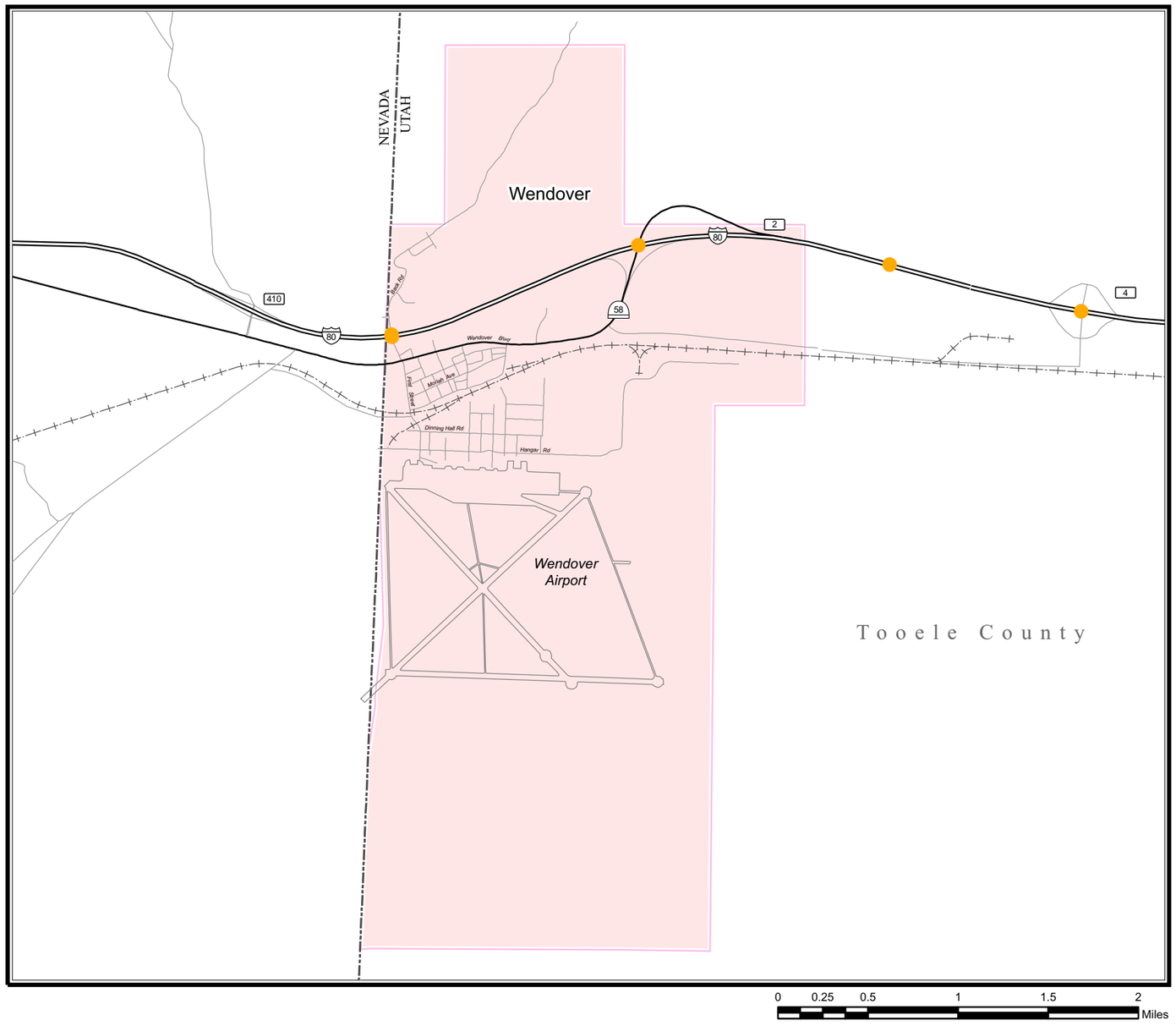
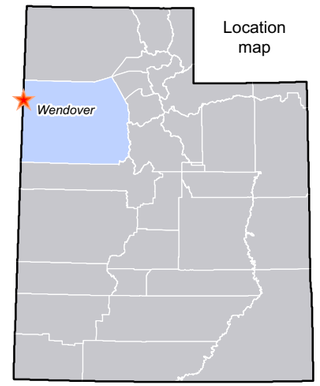


Figure 1-2. Study Vicinity Map





N

State Bridges
State Roads
Other Roads
Railroad
Study Boundary
City Boundaries

1.5. Study Process

The Study, which began in May 2006, is proceeding as a cooperative effort between Wendover City, UDOT, and local community members. It is being conducted under the guidance of Wendover Officials.

The following individuals participated in the initial meetings to provide input used to create this document. This group listed below will be referred to as the Technical Advisory Committee, or "TAC," for this document.

- Brett Shelton, Mayor
- Glen Wadsworth, City Administrator
- Karl Jorgensen, City Council member
- Mike Crawford, City Council member
- Gertrude Tripp, City Council member
- Mark Tripp, City Council member
- Danny Robertson, UDOT Maintenance Shed Supervisor
- Gary Bean, City Council member
- Margaret Wheeler, City Clerk / Recorder
- Vaughn Tripp, Police Chief
- Darlene Teamell, City Treasurer
- Rudy Anderson, Head Start Program
- Kerry Robertson, WREC
- Sherlee Shelton, Citizen
- Devan Croasmun, Reporter
- Jean Phizackleore, Citizen
- Lois Slef, Citizen
- Amanda Shupe, Citizen
- Patsy peek, Citizen
- Heathe Castagno, Citizen
- Ken Cortagno, Citizen
- Dawn Ashby, Citizen
- Dale Higley, Citizen
- Kent Parsons, Citizen
- Joseph Burke, City Planning & Zoning
- John Saastamoinen, Citizen

The study process for the Wendover Community Transportation Plan consists of three basic parts: (1) inventory and analysis of existing conditions, (2) projection of future conditions, and (3) development of a community transportation plan (CTP). This process involves the participation of the TAC for guidance, review, evaluation and recommendations in developing the TMP to include development of future projects for the identified study area.

The TAC will evaluate each part of the study process. Their comments will be incorporated into the study's final report draft. The remainder of the final report draft will focus on the recommendation and implementation portion of the transportation plan program. Transportation projects that will be recommended for the short-term and long-range needs will be developed based on the TAC's recommendations and concurrence.

The study process allows for the solicitation of input from the public at two TAC workshops. This public participation element is included in the study process to ensure that any decisions made regarding this study are acceptable to the community.

The first TAC workshop provides an inventory and analysis of existing conditions and identification of needed transportation improvements. The second TAC workshop will focus on prioritization of projects, estimation of project costs, and discussion of the funding processes.

The TAC is expected to recommend those comments that are to be incorporated into the report and applicable to the goals of this study. The final report draft will be submitted to the City for review and comments.

Upon local review of the draft report, UDOT will prepare appropriate changes and submit the final report to the City for approval. The final report will describe the study process, findings and conclusions, and will document the recommended transportation system projects and improvements.

2. Existing Conditions

An inventory and evaluation of existing conditions within the study area was conducted to identify existing transportation problems or issues. The results of the investigation follow.

2.1. Land Use

In order to analyze and forecast traffic volumes, it is essential to understand the land use patterns within the study area. Much of the City is zoned Residential, but there are also many issues dealing with commercial and industrial properties. By analyzing the patterns or changes in land use, we can better predict the ever-changing transportation needs.

The Wendover Zoning map follows in the appendix.

2.2. Environmental

In Utah there are a variety of local environmental issues. Each of the cities and counties need to look at what are the environmental issues in their areas on a case-by-case basis. There are many resources that can help local entities to determine what issues need to be addressed and how any problems that may exist can be resolved.

Some of the environmental concerns around the State are wetlands, endangered species, archeological sites, and geological sites among other issues. Environmental concerns should be addressed when looking at an area for any type of improvement to the transportation system. Protecting the environment is a critical part of the transportation planning process.

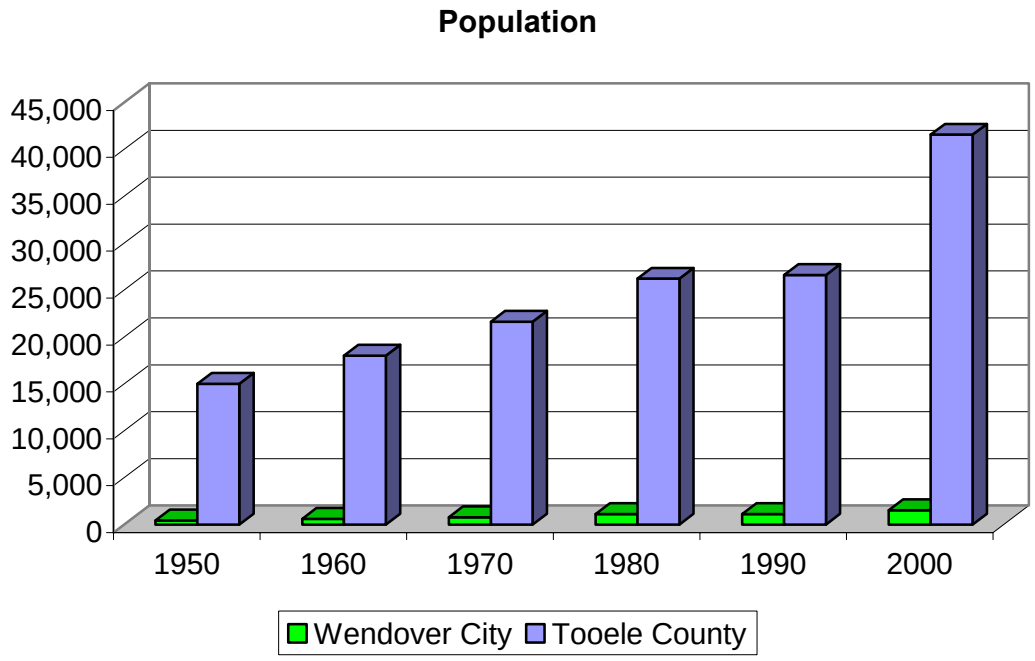
The Bonneville Salt Flats (BSF), immediately east of the City of Wendover, are not only listed on the National Register of Historic Places (as the site of world land-speed records), but have also been designated as an Area of Critical Environmental Concern (ACEC) due to their unique geologic characteristics. The historic features and unique physical characteristics have made BSF an area of national and international interest. The lands surrounding the BSF and Wendover City, are a fragile resource where care should be exercised.

2.3. Socio-Economic (Census Brief: Cities and Counties of Utah, May 2001)

Wendover City ranks 111th out of 237 incorporated cities and towns for population in the state of Utah. Historical growth rates have been identified for this study, because past growth is usually a good indicator of what might occur in the future. Chart 2-1 identifies the population growth over the past 50 years for the State of Utah, Tooele County and Wendover. Chart 2-2 identifies that population change in Wendover has ranged from 40.72% between 1970 and 1980 to 2.55% between 1980 and 1990.

Chart 2-1 Population

Year	Utah	Tooele County	Wendover
1950	695,900	15,000	na
1960	900,000	18,000	609
1970	1,066,000	21,600	781
1980	1,474,000	26,200	1,099
1990	1,729,227	26,581	1,127
2000	2,246,553	41,549	1,537



Source: U.S. Bureau of the Census
Governor's Office of Planning and Budget
http://www.governor.utah.gov/dea

Chart 2-3 identifies yearly population growth rates for the State of Utah and Tooele County.

As the State population has grown every decade from 1950 until 2000, Tooele County has also grown in the same time period.

Wendover has some unique demographic characteristics when compared with the State. Wendover has a significant younger population. In the under 14 age category, the State is at 26.6%, the County is at 29.1% and the City is at 34.8%. For the 65+ age category, the state is at 8.5%, the county is at 7.3% and the City is at 3.9%. The State's median age is 27.1 years; the County's median age is 27.1 years; the City's median age is 23.7 years. Another interesting statistic is that of the Hispanic population. The State is at 9.0%, the County is at 10.3%, and the City is at 68.6%.

The 1999 median household income in Wendover was $31,196, compared to the State median household income of $45,773.

The unemployment rate in Wendover was 5.6 % in 2000. In 2000 there were approximately 638 employed people in Wendover, or 63.8% of the population over age 16. The City had 56 unemployed people, which is 5.6% of the population over age 16. There are 18,073 employed civilians in Tooele County, or 64.4% of the population over age 16. The County has 1,066 people unemployed, which is 3.8% of the population over age 16.

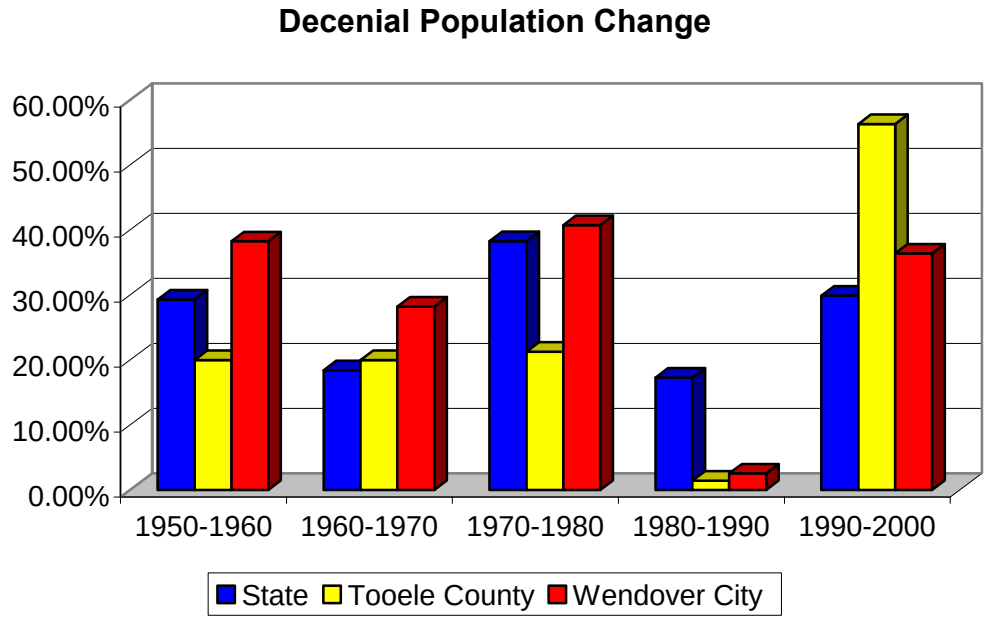
Chart 2-4 identifies the employment growth rate for Tooele County.

The majority of employees in Tooele County work in four primary employment sectors: Government, Manufacturing, Trade, and Services. In Tooele County, these sectors make up 81.48% of the labor force.

Chart 2-5 identifies the various employment sectors in Tooele County.

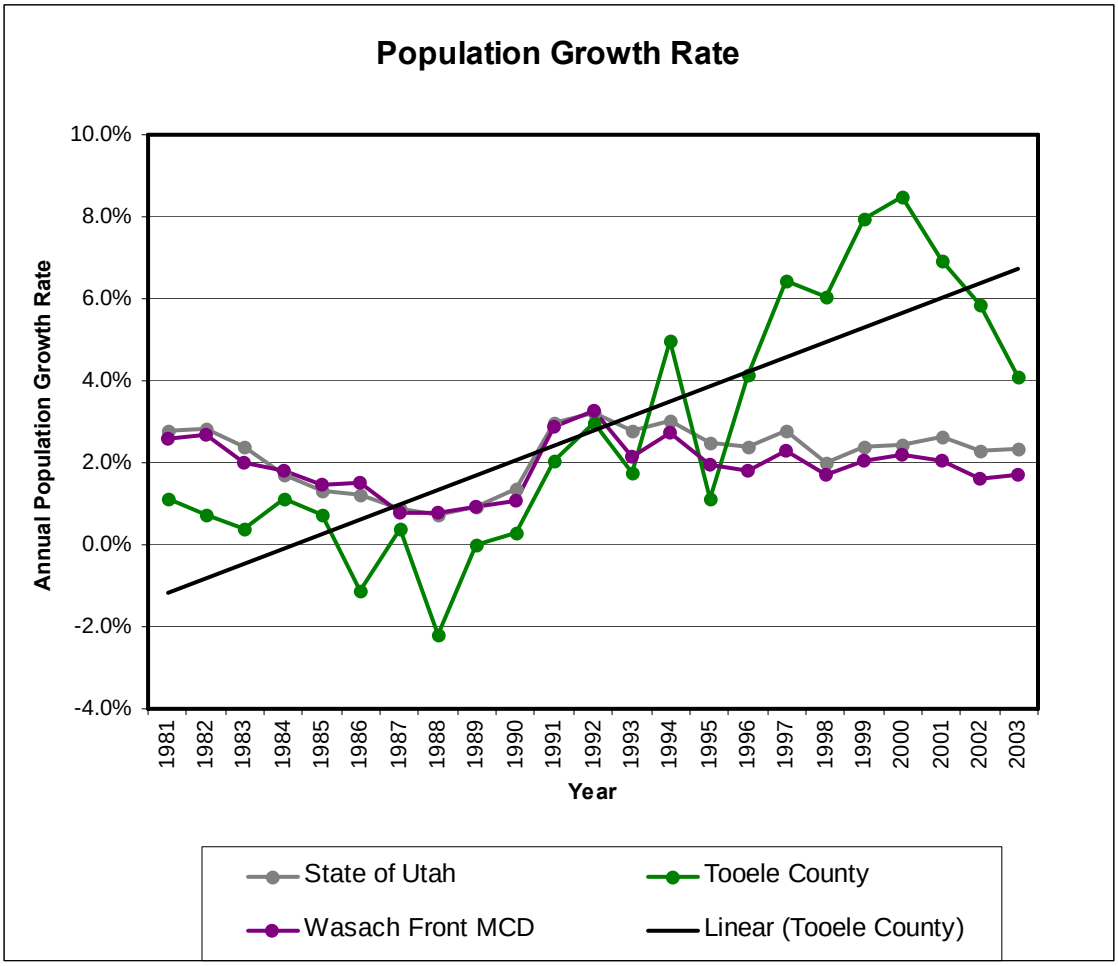
Chart 2-2. Population Change

Decade	Utah	Tooele County	Wendover
1950-1960	29.33%	20.00%	38.25%
1960-1970	18.44%	20.00%	28.24%
1970-1980	38.27%	21.30%	40.72%
1980-1990	17.32%	1.45%	2.55%
1990-2000	29.92%	56.31%	36.38%



Source: U.S. Bureau of the Census
Governor's Office of Planning and Budget
http://www.governor.utah.gov/dea

Chart 2-3. Population Growth Rate (1980-2000)

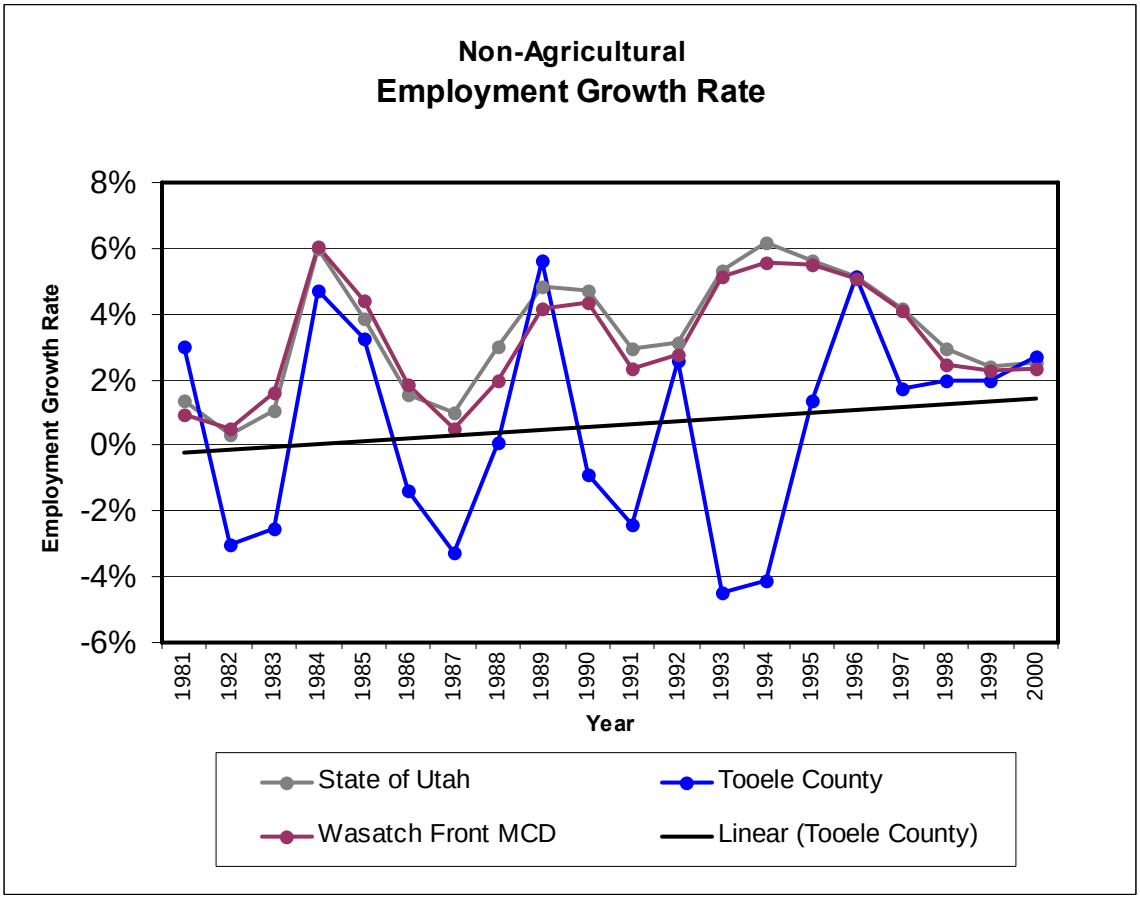


MCD = Multi-County District

Wasatch MCD = Davis, Morgan, Salt Lake, Tooele, Weber Counties

Source: Governors Office of Planning and Budget
http://www.governor.utah.gov/dea

Chart 2-4. Employment Growth Rate (1980-2000)



MCD = Multi-County District

Wasatch MCD = Davis, Morgan, Salt Lake, Tooele, Weber Counties

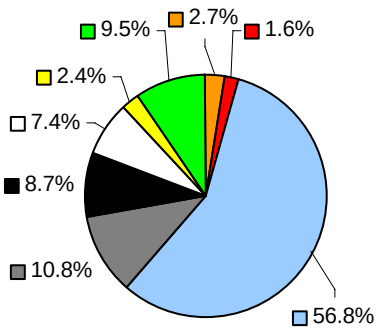
Source: Governors Office of Planning and Budget
http://www.governor.utah.gov/dea

Chart 2-5. Employment Occupation Sectors (1980-2000)

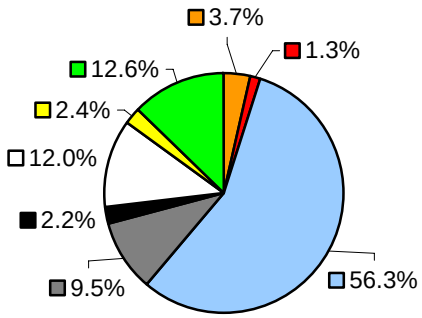
	Sector	1980	1990	2000	Δ% 1980-2000
	Construction	2.70%	3.73%	5.43%	125.28%
	FIRE	1.68%	1.28%	2.56%	71.26%
	Government	57.78%	56.66%	30.70%	-40.46%
	Manufacturing	11.00%	9.62%	13.24%	34.89%
	Mining	8.89%	2.18%	0.36%	-95.48%
	Services	7.52%	12.08%	18.30%	172.63%
	TCPU	2.48%	2.44%	10.88%	391.50%
	Trade	9.66%	12.74%	19.24%	123.18%

FIRE = Finance, Insurance & Real Estate
TCPU = Telecommunications & Public Utilities

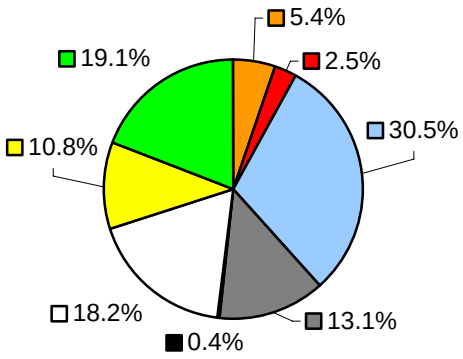
1980 Employment Sectors



1990 Employment Sectors



2000 Employment Sectors



Source: Governors Office of Planning and Budget
http://www.governor.utah.gov/dea

2.4. Functional Street Classification

This document identifies the current functional characteristics of the federal aid roadway network of Wendover. Functional street classification is a subjective means to identify how a roadway functions when a combination of the roadway's characteristics are evaluated. These characteristics include; roadway configuration, right-of-way, traffic volume, carrying capacity, property access, speed limit, roadway spacing, and length of trips using the roadway.

The primary functional classifications used in categorizing federal aid roadways of Wendover are: Interstate, Major Collector, and Local.

An Arterial's function is to provide traffic mobility at higher speeds with limited property access. Traffic from the local roads is gathered by the Collector system, which provides a balance between mobility and property access trips. Local streets and roads serve property access based trips and these trips are generally shorter in length.

The Wendover area is accessed by I-80 via SR-58. SR-58 bisects the City east to west. I-80 extends eastward toward the Wasatch Front, Salt Lake City area, at a distance of approximately 120 miles.

The current functionally classified system generally defines the higher traffic roads, so only minor additions or changes will be required.

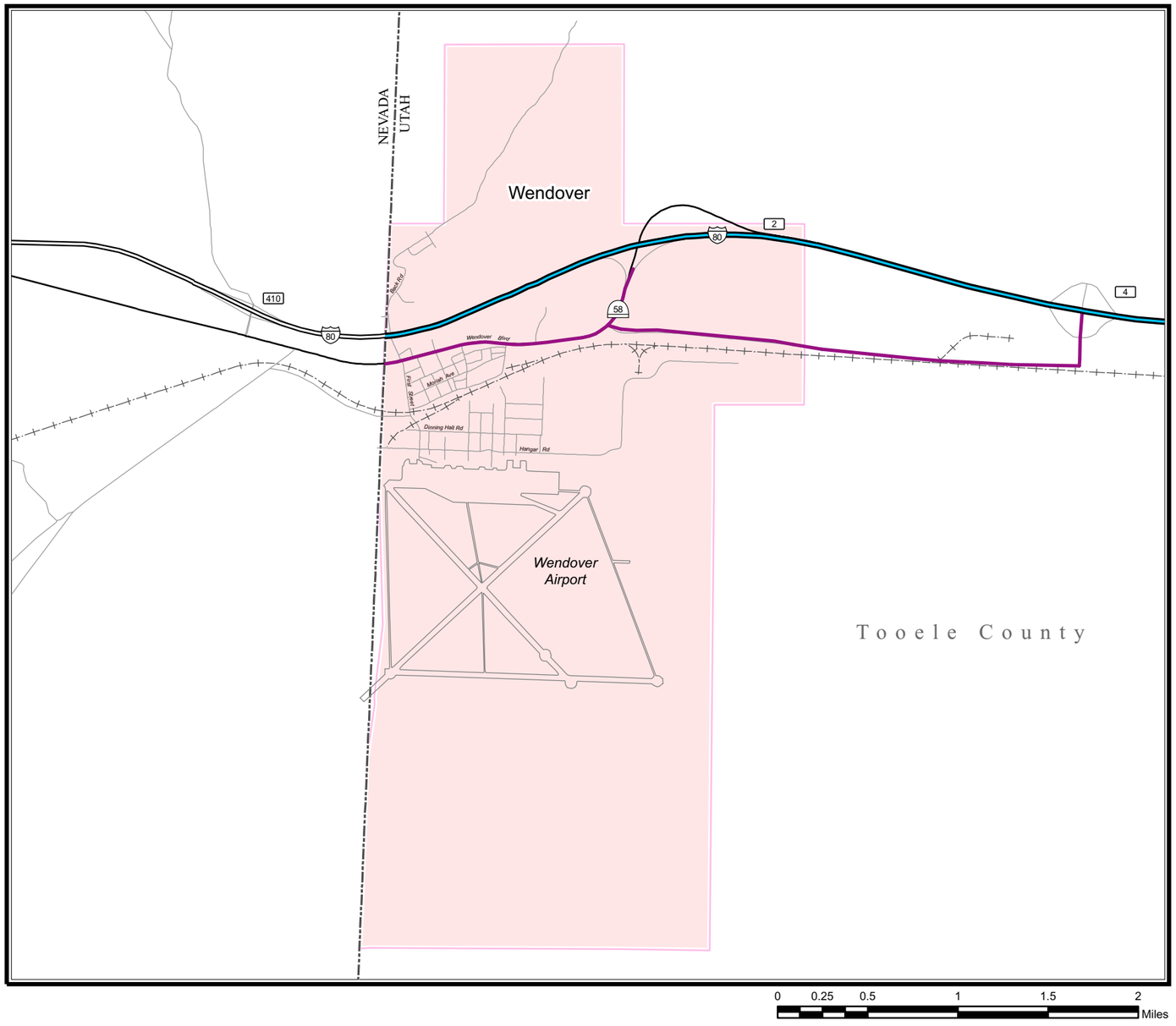
2.5. Bridges

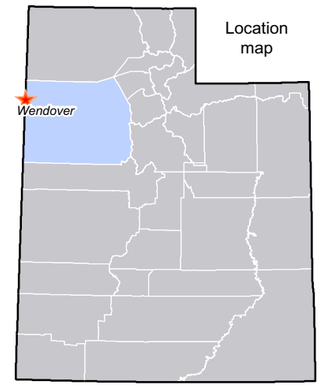
There are (4) bridges on the state system located in the study area that could be eligible for federal bridge maintenance, rehabilitation, or replacement funds. Bridges are maintained and minor repairs made with maintenance funds. A bridge is rehabilitated or replaced as it deteriorates over time and as traffic volumes increase. Sufficiency rating indicates current condition of the structure with a rating of 100 showing a structure that is in excellent shape. A rating nearing 50 will reveal a structure that is in need of attention and is eligible for federal funding. Table 2-1 Summarizes the bridge structures in and around the study area.

Table 2-1 – Bridge Sufficiency Ratings

Bridge Number	Rte	Location	Bridge Rating
C-592	80	4 mi east of Wendover Co Road & I-80	98.9
F-412	80	3 mi east of Wendover	Ped. Bridge
C-591	58	1 mi east of Wendover	80.2
2F-361	80	North Side of Wendover	95.9
4F-361	80	North Side of Wendover	95.9

Figure 2-1. Functional Classification Map





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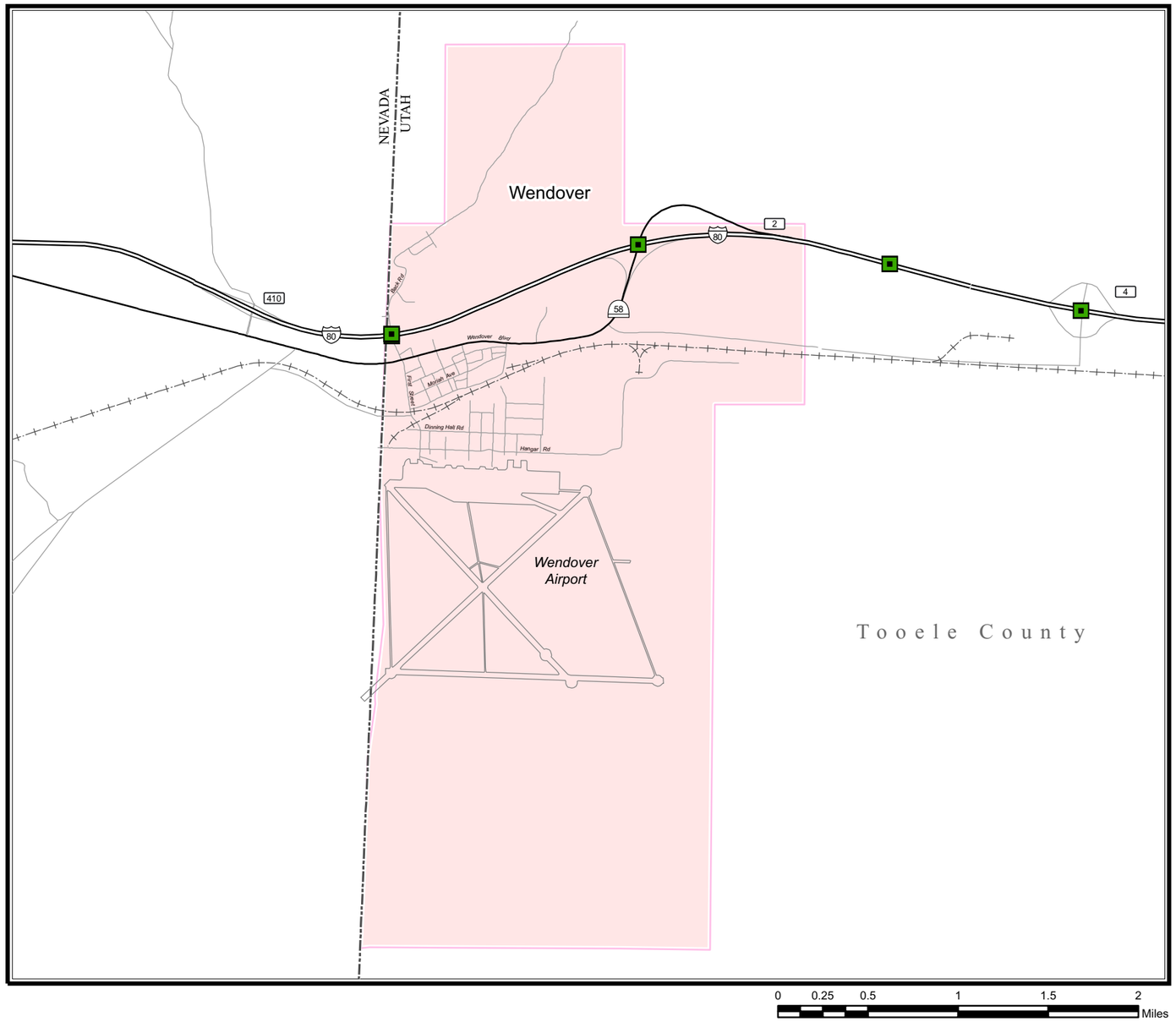
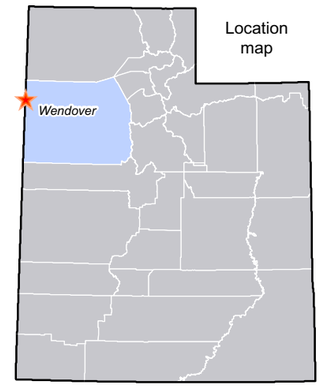
Functional Class

- Interstate
- Freeway Expressway
- Other Principal Arterial
- Minor Arterial
- Collector
- Minor Collector
- Local
- Other Roads
- City Boundaries

NOTE: Proprosed Routes are indicated by dashed line.

Figure 2-2. Bridge Sufficiency Map





Bridges

Funding

- Eligible for Replacement Funds
- Eligible for Rehabilitation Funds
- Maintenance Funds Only
- StateRoads
- Other Roads
- Railroad
- City Boundaries

2.6. Traffic Counts

Recent average daily traffic count data were obtained from UDOT. Table 2-2 shows the traffic count data on the key state roadways of the study area. The number of vehicles in both directions that pass over a given segment of roadway in a 24-hour period is referred to as the average annual daily traffic (AADT) for that segment.

Table 2-2 Average Daily Traffic

Road	Segment	Year	AADT
I-80	Nevada line to Wendover Interchange	2004	6,110
58	Nevada Line to 900 East	2004	13,840
58	900 East to MP 0.86	2004	13,840
58	MP 0.86 to MP 1.28	2004	5,665
58	MP 1.28 to Wendover Interchange	2004	5,005

Charts 2-6, 2-7, and 2-8 illustrate the average daily traffic variation on state facilities in the study area by Month, Day, and hour:

A map illustrating existing and future traffic, peak season traffic, and roadway capacities is presented in the Traffic Forecast section 3.2.

2.7. Traffic Accidents

Traffic accident data was obtained from UDOT's database of reported accidents from 2004. Table 2-3 summarizes the accident statistics for those segments for the year 2004. Additional information includes the average daily traffic, the number of reported accidents, and the accident rates. The roadway segment accident rates were determined in terms of accidents per million vehicle miles traveled. The crash rates for each roadway segment are compared to the expected crash rate for similar facilities across the state.

Upon review of the accident data for the state system in the area, there appears to be higher than expected accident rates at the following locations:

- I-80 from mile post 0.00 to mile post 1.48

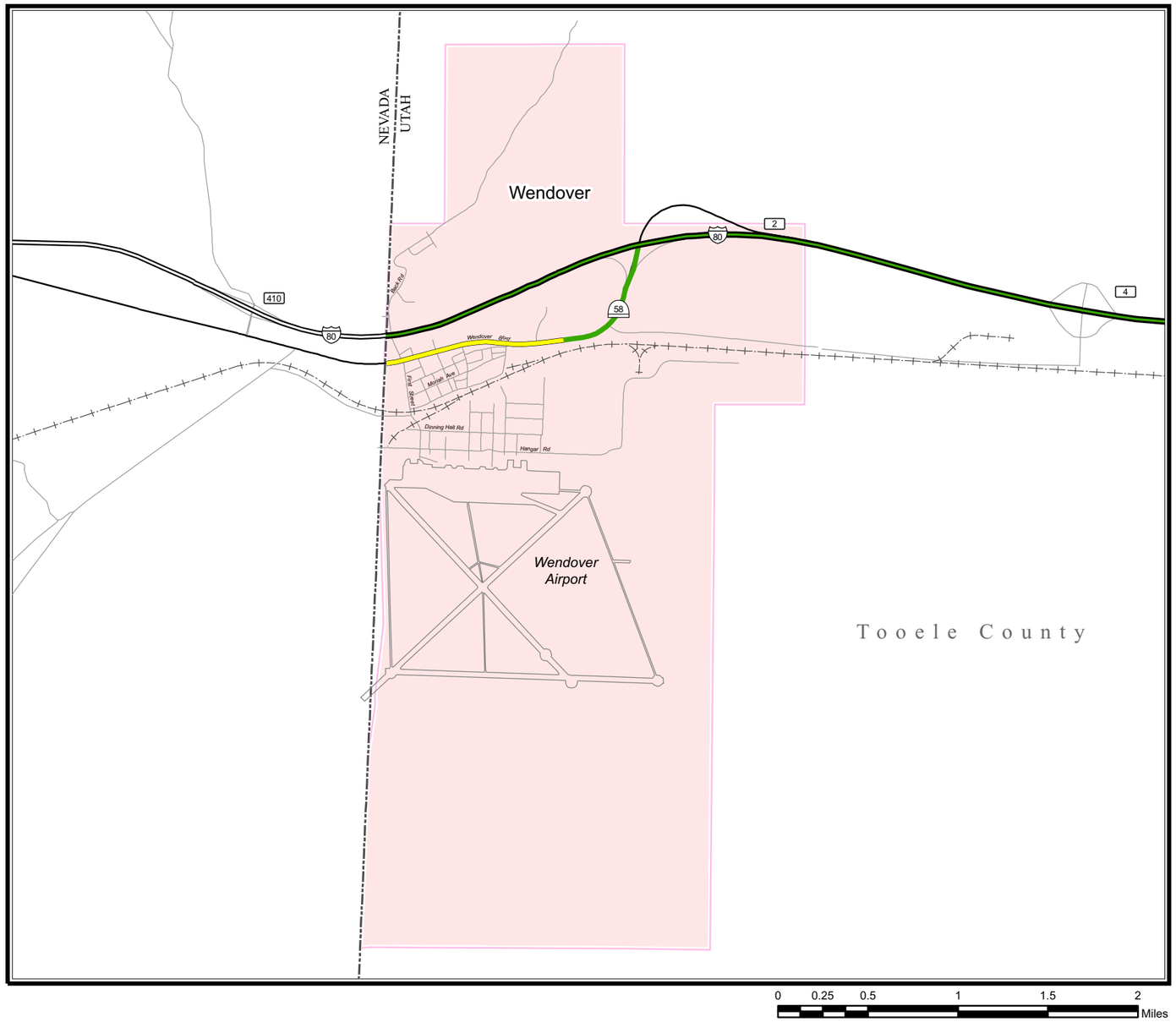
The remainder of the state system shows a lower than expected accident rate.

Figure 2-4 shows the safety index, which incorporates crash data taken from 2002-2004 for each of the various segments of the state highway system in the study area.

The safety index is a composite of number of accidents, daily traffic, and the severity for each state highway segment.

Wendover may wish to review the accident history for the local street system to identify any specific accident hot spot locations.

Figure 2-3.State Road Safety Index



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State Roads

Safety Index Group

- Low
- Medium
- High
- Other Roads
- Water Courses
- City Boundaries

Chart 2-6 Monthly ADT

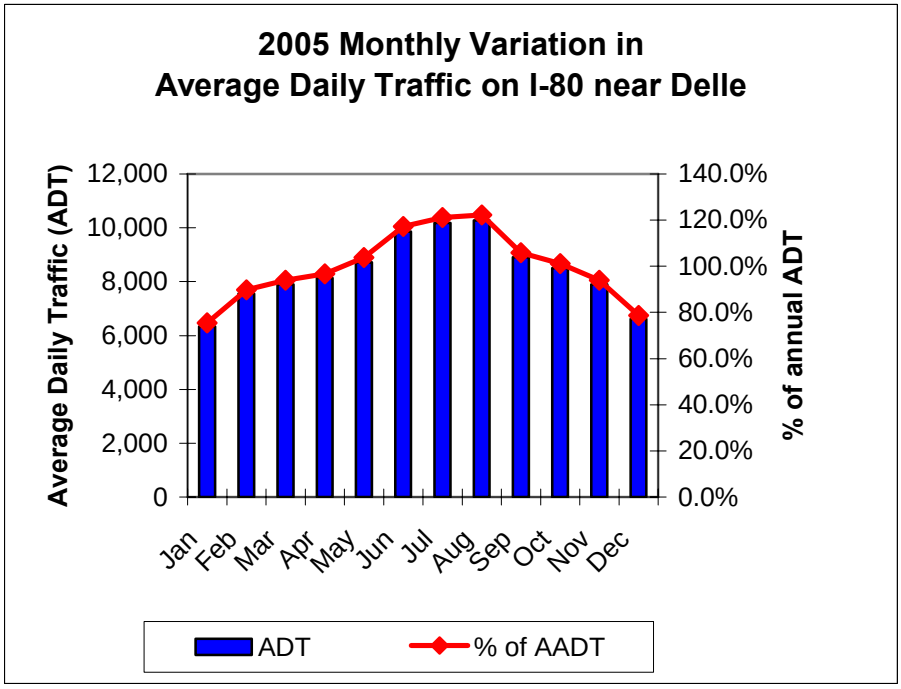


Chart 2-7 Daily ADT

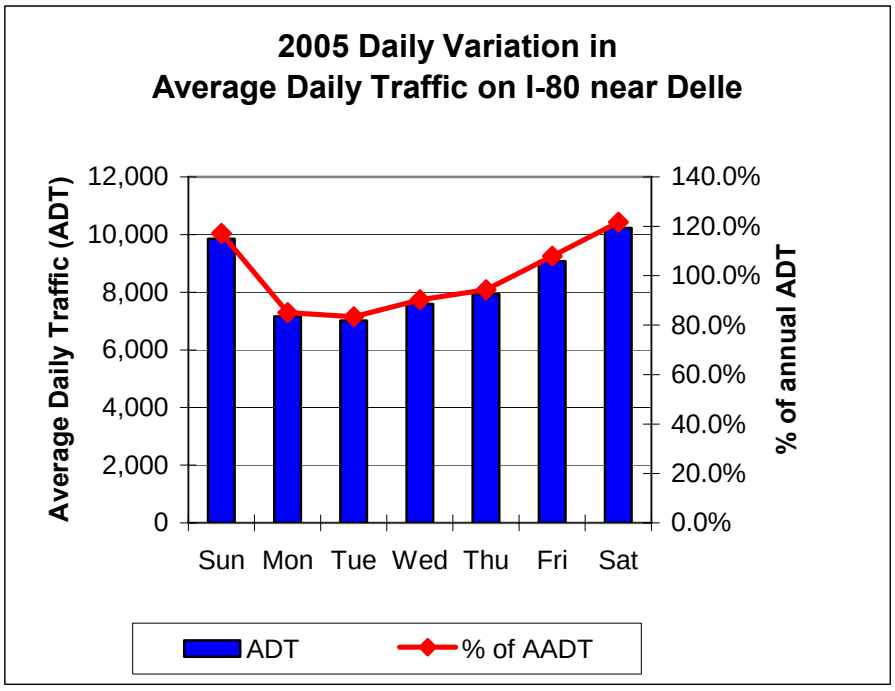


Chart 2-8 Hourly ADT

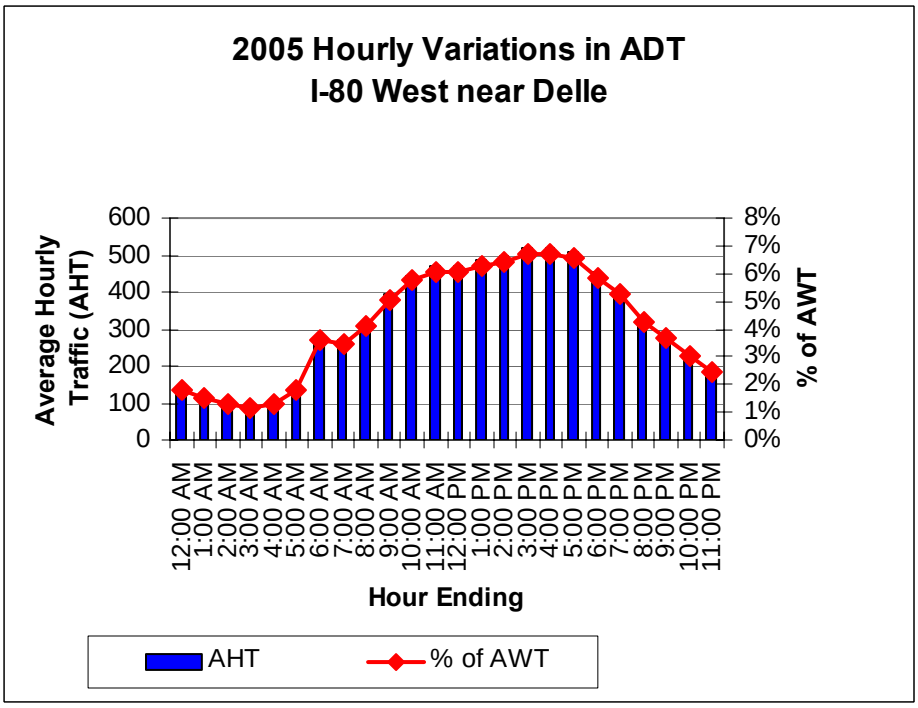


Table 2-3. Crash Data 2004

Road	From Milepost	End Milepost	ADT (2004)	# Crashes (2004)	Crash Rate **	
					Actual	Expected*
58	0	0.68	13,840	4	1.25	1.27
58	0.68	0.86	13,840	0	0.00	1.27
58	0.86	1.28	5,665	0	0.00	1.81
58	1.28	1.56	5,005	0	0.00	1.81
80	0.00	1.48	6,110	3*	0.91	0.72
80	1.48	2.55	7,835	5	1.66	0.72

* One Fatal accident

Statewide average accident rates for functional class and volume group.
Accident rates are per million vehicle miles traveled
Red indicates higher than expected rates of accidents

2.8. Bicycle and Pedestrian

The Federal Highway Administration recognizes the increasingly important role of bicycling and walking in creating a balanced, intermodal transportation system, and encourages state and local governments to incorporate all necessary provisions to accommodate bicycle and pedestrian traffic. In following this directive, Wendover City is encouraged to adopt a "complete streets" philosophy that allows for the advancement of a transportation system for both motorized and non-motorized travel.

2.8.1. Biking/Trails

Wendover City is located at the western most side of the state and is accessed from Interstate 80. This section of I-80 is open to bicycle travel from the state line to exit number 113 in Salt Lake County. There are a few experienced bicyclists that choose to travel on the shoulder of the interstate from Utah to Nevada, passing through or stopping in Wendover. The desert climate, high volume truck traffic, and lack of facilities between destination points should be considered before attempting to bicycle this route.

There are organized mountain biking races that occur near Wendover, such as the Bordertown Challenge held in the summer months. However, most of the bicyclists riding within the City limits are residents. There has not been a need for designated bicycle lanes on the City's streets, most ride on the roadway shoulder.

There are a number of ATV's in use in the City. A few problems have been expressed due to out-of-bounds riding, and drafting a City ordinance to deal with these problem areas may be warranted. As yet, there are not any off-highway trails dedicated to these motorized vehicles.

The City is actively pursuing development of a robust trails plan and is seeking grant funding from State Parks and Recreation in order to provide a connected trails system for Wendover City residents and visitors. The prioritized list of trails possibilities include:

- Historic Bicycle and Walking Trail – from the center of town to the airport, noting the historic points with markings posted along the way.
- Pilot Springs – travel from the Salt Flats to the base of Pilot Mountain. The trail will be for motorized vehicles, with the potential for some hiking.
- Floating Island – trail will be accessed at the Salt Flats. The trail is aptly named due to the "mirage" of an island on this desert terrain.
- Salt Flats – trail will include side trips to Danger Cave and Juke Box Cave.

2.8.2. Pedestrians

Walking is a part of every trip and the residents of Wendover routinely use this mode of travel. The 2000 U.S. Census reports that 22% of Wendover's total population walked to work, compared to the Utah state average of 2.8%. This indicates a desire and a need for the construction of pedestrian accommodations to safely facilitate this mode of transportation.

There are sidewalks in place in the center of the City and in the newer developments above town; however, many other areas in Wendover are in need of sidewalks. To begin to remedy this, Wendover has adopted a requirement that developers must include sidewalk in all new development plans. The schools within the City have sidewalks with the appropriate accompanying pavement markings. However, it is recommended that the city review each school access route plan for sidewalk continuity.

2.9. Public Transportation

Wendover, Utah does not have an internal public transportation system. There is limited bus service provided by the West Wendover, Nevada casinos up and down Main St. in Wendover, Utah.

Wendover is a stop on Greyhound's transcontinental route along I-80 between Salt Lake City and the San Francisco Bay Area. Wendover's Greyhound stop is located at the Pilot Truck Stop in West Wendover, Nevada, with two buses stopping daily in each direction.

It is also possible for local residents to buy tickets aboard the casino buses which link various Wasatch Front cities with the casinos in West Wendover, Nevada. However, this service has not been fully developed or promoted to local residents, and many people are not aware that such a service is available to them.

Amtrak's "California Zephyr" passenger train passes through Wendover early each morning en route to and from Chicago and the San Francisco Bay Area via Denver, Salt Lake City and Reno. However, Amtrak has never stopped in Wendover, despite periodic interest given that possibility by the West Wendover casino industry. The nearest Amtrak passenger stop is in downtown Salt Lake City more than 125 miles to the east. Interest in adding Wendover as an Amtrak stop continues in both West Wendover, as well as in Wendover, Utah.

As discussed in the Aviation section of this plan, no regular commercial airline service is

available in Wendover despite the many casino jet flights that arrive and depart each week. The nearest commercial airline service is in Salt Lake City.

2.10. Freight

Wendover is located along Interstate Highway 80, America's busiest east/west truck route. Many truckers time their transcontinental journeys to allow for a rest stop in the Wendover area. However, the vast majority of trucks stopping in the Wendover area are patronizing the casinos in West Wendover, Nevada, and entering and leaving I-80 at that point. As such, relatively little long-distance truck traffic passes through Wendover, Utah on the community's Main Street, SR 58.

Wendover does generate some truck freight traffic, primarily from mineral extraction industries located east of town on the Bonneville Salt Flats. Additionally, copper concentrate is trucked to a loading facility on the Union Pacific Railroad at the east end of Wendover from the recently-reopened copper mine at Ruth, Nevada, near the town of Ely. These longer-combination vehicle (LCV) concentrate trucks enter and leave Wendover, Utah via Airport Way from US Highway 93 Alternate, which is rapidly crumbling under the weight of the trucks in question. The mining company is making special payments to Wendover for the impacts of their trucks on Airport Way.

The Union Pacific Railroad provides railroad freight service to Wendover via the former Western Pacific mainline, having merged with WP in 1982.A small freight yard to serve local industries is maintained at the east end of Wendover, and is a remnant of the WP's more extensive operations there up until the 1960's. Several mainline freight trains of the UP, as well as Burlington Northern Santa Fe (BNSF) pass through Wendover daily, along with Amtrak's "California Zephyr" passenger train. However, only UP's daily Salt Lake City to Wendover local freight actually stops in town to switch local industries. UP's Wendover Local originates at Roper Yard in Salt Lake City and operates out to Wendover one day, returning to Salt Lake the next.

Wendover sees only very limited air cargo operations with the Salt Lake City International Airport being the nearest major air cargo hub.

2.11. Aviation Facilities & Operations

Wendover Airport is owned and operated by Tooele County, and is the former US Air Force Base and US Army Air Base at Wendover dating back to World War II. Wendover Airport is an uncontrolled field

that is equipped with two primary runways; #12/30 that is 8,000 ft. long and 100 ft. wide, and #8/26 which is also 8,000 ft. long but is 150 ft. wide. Both primary runways are asphalt-paved and fully lighted, and there is a dusk to dawn aviation beacon light adjacent to the airfield atop an old water tank on a nearby hill. Both 100 low lead and Jet-A fuel are available at Wendover, along with extensive ramp space for tie-downs, along with hangar space in the WWII-vintage military hangars.

Regular commercial airline service is not available at Wendover, with the nearest such service at the Salt Lake City International Airport, about 120 miles to the east. However, West Wendover, Nevada casinos operated chartered "Casino Express" flights from various cities around the country into Wendover. These flights use a Boeing 737-300 jet airliner operated by Airmax Corportation.

Future plans for the Wendover Airport include the installation of an Instrument Landing System (ILS), improved concrete hardstands, a connector taxiway between the ramp and runway #26, and a new passenger terminal for the aforementioned charter flights. The condition of the access road to the airport is an issue of concern relative to future growth at the Wendover Airport.

2.12. Revenue

Maintenance of existing transportation facilities and construction of new facilities come primarily from revenue sources that include the Wendover City general fund, Federal funds and State Class C funds.

Financing for local transportation projects consists of a combination of federal, state, and local revenues. However, this total is not entirely available for transportation improvement projects, since annual operating and maintenance costs must be deducted from the total revenue. In addition, the City is limited in their ability to subsidize the transportation budget from general fund revenues.

2.12.1. State Class B and C Program

The distribution of Class B and C Program monies is established by state legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Twenty-five percent of the funds derived from the taxes and fees are distributed to

cities and counties for construction and maintenance programs.

Class B and C funds are allocated to each City and county by the following formula: 50% based on the population ratio of the local jurisdiction with the population of the State, 50% based on the ratio that the Class B roads weighted mileage within each county and the class C roads weighted mileage within each municipality bear to the total class B and Class C roads weighted mileage within the state. Weighted means the sum of the following: (i) paved roads multiplied by five; (ii) graveled road miles multiplied by two; and (iii) all other road types multiplied by one. (Utah Code 72-2-108) For more information go to UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for "Local Government Assistance" here you will find the Regulations governing Class B&C funds.

The table below identifies the ratio used to determine the amount of B and C funds allocated.

Class B and C funds can be used for maintenance and construction of highways, however thirty percent of the funds must be used for construction or maintenance projects that exceed $40,000. Class B and C funds can also be used for matching federal funds or to pay the principal, interest, premiums, and reserves issued for bonds.

Wendover received $59,868.32 in Fiscal Year 2005 for its Class C fund allocation.

Apportionment Method of Class B and C Funds

Based on	Of
50%	Roadway Mileage *Based on Surface Type Classification (Weighted Measure) Paved Road (X 5) Graveled Road (X 2) Other Road (X 1)
50%	Total Population

2.12.2 Federal Funds

There are federal monies that are available to cities and counties through federal-aid programs. The funds are administered by the Utah Department of Transportation. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) provides funding for any road that is functionally classified as a collector street or higher. STP funds can be used for a range of projects including rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State for urban areas. A portion of the STP funds can be used in any area of the State, at the discretion of the State Transportation Commission.

Transportation Enhancement funds are allocated based on a competitive application

process. The Transportation Enhancement Advisory Committee reviews the applications and then a portion of those are recommended to the State Transportation Commission for funding. Transportation enhancements include 12 categories ranging from historic preservation, to bicycle and pedestrian facilities, to water runoff mitigation. Other funds that are available are State Trails Funds, administered by the Division of Wildlife Resources.

The amount of money available for projects specifically in the study area varies each year depending on the planned projects in UDOT's Region One. As a result, federal aid program monies are not listed as part of the study area's transportation revenue.

2.12.3 Local Funds

Wendover, like most cities, has utilized general fund revenues in its transportation program. Other options available to improve the City's transportation facilities could involve some type of bonding arrangement, either through the creation of a redevelopment district or a special improvement district. These districts are organized for the purpose of funding a single, specific project that benefits an identifiable group of properties. Another source of funding is through general obligation bonding arrangements for projects felt to be beneficial to the entire entity issuing the bonds.

2.12.4 Private Sources

Private interests often provide alternative funding for transportation improvements. Developers construct the local streets within the subdivisions and often dedicate right-of-way and participate in the construction of collector or arterial streets adjacent to their developments. Developers can be considered as an alternative source of funds for projects because of the impacts of the development, such as the need for traffic signals or street widening. Developers should be expected to mitigate certain impacts resulting from their developments. The need for improvements, such as traffic signals or street widening can be mitigated through direct construction or impact fees.

3. Future Conditions

3.1. Land Use and Growth

Wendover's Community Transportation Plan must be responsive to current and future needs of the area. The area's growth must be estimated and incorporated into the evaluation and analysis of future transportation needs. This is done by:

- Forecasting future population, employment, and land use;
- Projecting traffic demand;
- Forecasting roadway travel volumes;
- Evaluating transportation system impacts;
- Documenting transportation system needs; and
- Identifying improvements to meet those needs.

This chapter summarizes the population, employment, and land use projections developed for the project study area. Future traffic volumes for the major roadway segments are based on projections utilizing 20 years of traffic count history. The forecasted traffic data are then used to identify future deficiencies in the transportation system.

3.1.1. Population and Employment Forecasts

The Governor's Office of Planning and Budget develop population and employment projections. The current population and employment levels, as well as the future projections for each are shown for Wendover and Tooele County in the following table.

Table 3-1 Current and Future Population and Employment

Year	Wendover City	Tooele County	
	Population	Population	Employment
2000	1,537	41,549	11,130
2030	unavailable	112,722	25,979

3.1.2 Future Land Use

The City has an annexation plan that describes where it plans to grow. Some areas for developments were discussed during the course of the Community Transportation Plan. Updated Land Use documents can be found in the Wendover General Plan.

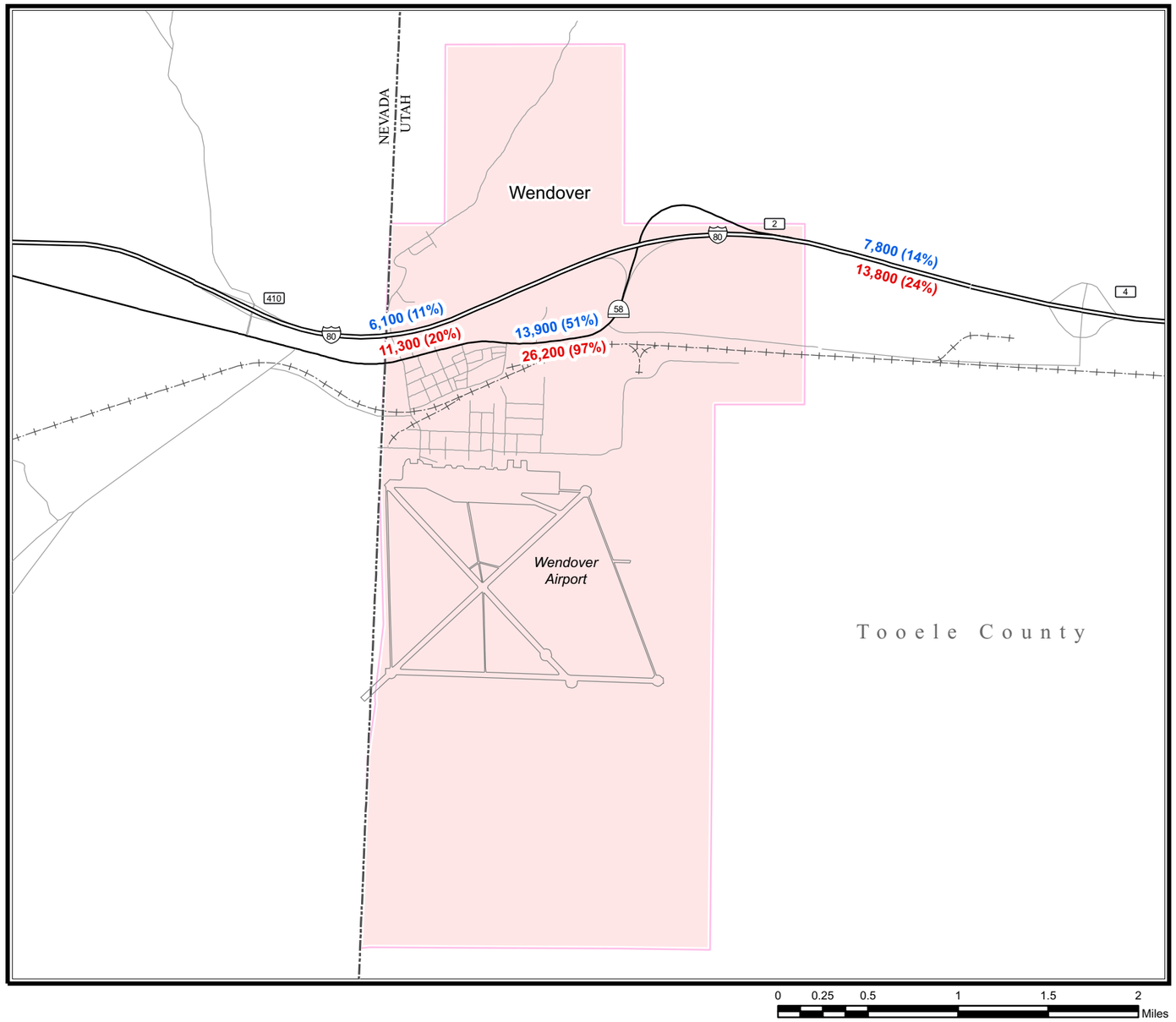
While specific development plans change with time, it is important to note possible areas of development within the Wendover area. Commercial and industrial growth is also important in understanding transportation needs.

3.2. Traffic Forecast

Traffic in the Wendover area is growing and will continue to grow. Traffic has historically grown at about 3% per year for the period from 1985 to 2004.

Figure 3-1 shows average annual daily traffic for years 2005 and 2030. Also shown is the percentage of the roadway capacity the traffic will reach. The map illustrates that no corridors should have capacity issues by the year 2030 if historical trends continue.

Figure 3-1. Average Annual Daily Traffic yr. 2004; yr. 2030



Wendover City Transportation Master Plan
Average Annual Daily Traffic
Year 2004 (% of Roadway Capacity)
Year 2030 (% of Roadway Capacity)

State Roads
Other Roads
Railroad
Study Boundary
City Boundaries

4. Transportation Improvement Projects

4.1. Current State Transportation Improvement Program (2006-2010 STIP)

At the present time there are no state sponsored STIP or Long Range Plan projects in the Wendover area. Regularly scheduled highway maintenance activities will however continue as expected.

4.2. Recommended Projects

The following list identifies the six projects that have been identified as having the highest priority to the Wendover Transportation Advisory Committee. These needs/issues were identified through a series of two meetings where the TAC identified the needs and set priorities for projects.

- **Sidewalks on Aria Blvd.**
- **Proposed northern access road to provide subdivisions north of I-80 a second option back into town**
- **Future Signal at Aria / 1st Street & SR-58 (Main)**
- **Program to re-pave city streets**
- **City Trail Study (Bike/Ped/ATV)**
- **Citywide Drainage Issues**

Additionally, many concerns, issues and potential projects were identified which are found on the attached community issues list.

4.3. Revenue Summary

4.3.1. Federal and State Participation

Federal and State participation is important for the success of implementing these projects. UDOT needs to see the Community Transportation Plan so that they understand what the City wants to do with its transportation system. UDOT can then weigh the priorities of the city against the rest of the state. It is important for Wendover to promote projects that can be placed on UDOT's five-year Statewide Transportation Improvement Program (STIP) as soon as possible. The process for placing projects into the STIP and funding of these projects can be found at UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for " Planning and Programming" here there is a subtopic entitled "Statewide Transportation Improvement Program (STIP)" that describes this program in detail. Additionally coordination with UDOT's Region Director and Engineer for Planning will be practical.

4.3.2. City Participation

The City will fund the local Wendover projects. The local match component and partnering opportunities vary by the funding source.

4.4. Other Potential Funding

Previous sections of this chapter show significant shortfalls projected for the short-range and long-range programs. The

following options may be available to help offset all or part of the anticipated shortfalls:

- Increased transportation impact fees.
- Increased general fund allocation to transportation projects.
- General obligation bonds repaid with property tax levies.
- Increased participation by developers, including cooperative programs and incentives.
- Special improvement districts (SIDs), whereby adjacent property owners are assessed portions of the project cost.
- Sales or other tax increase.
- State funding for improvements on the county roadway system.
- Increased gas tax, which would have to be approved by the State Legislature.
- Federal-aid available under one of the programs provided in the federal transportation bill (SAFETEA-LU is the current bill).

Increased general fund allocation means that General Funds must be diverted from other governmental services and/or programs. General obligation bonds provide initial capital for transportation improvement projects but add to the debt service of the governmental agency. One way to avoid increased taxes needed to retire the debt is to sell bonds repaid with a portion of the municipalities' State Class monies for a certain number of years.

Participation by private developers provides a promising funding mechanism for new projects. Developers can contribute to transportation projects by constructing on-site improvements along their site frontage and by paying development fees. Municipalities commonly require developers to dedicate right-of-way and widen streets along the site frontage. A negative side of the on-site improvements is that the streets are improved in pieces. If there are not several developers adjacent to one another at the same time, a continuous improved road is not provided. One way to overcome this problem is for the jurisdiction to construct the street and charge the developers their share when they develop their property.

Another way developers can participate is through development fees. The fees would be based on the additional improvements required to accommodate the new development and would be proportioned among each development. The expenditure of additional funds provided by the fees would be subject to the City's spending limit. However, development fees are often a controversial issue and may or may not be an appropriate method of funding projects.

5. Planning Issues, Guidelines, and Other Data

Provided below is a discussion of various issues with a focus on elements that promote a safe and efficient transportation system in the future.

5.1. Guidelines and Policies

These guidelines address certain areas of concern that are applicable to Wendover Transportation Plan.

5.1.1. Access Management

This section will define and describe some of the aspects of Access Management for roadways and why it is so important. Access Management can make many of the roads in a system work better and operate more safely if properly implemented. There are many benefits to properly implemented access management. Some of the benefits follow:

- Reduction in traffic conflicts and accidents
- Reduced traffic congestion
- Preservation of traffic capacity and level of service
- Improved economic benefits businesses and service agencies
- Potential reductions in air pollution from vehicle exhausts

5.1.1.1. Definition

Access management is the process of comprehensive application of traffic engineering techniques in a manner that seeks to optimize highway system performance in terms of safety, capacity, and speed. Access Management is one tool of many that makes a traffic system work better with what is available.

5.1.1.2. Access Management Techniques

There are many techniques that can be used in access management. The most common techniques are signal spacing, street spacing, access spacing, and interchange to crossroad access spacing. There are various distances for each spacing, dependant upon the roadway type being accessed and the accessing roadway. UDOT has developed an access management program and more information can be gathered from the UDOT website and from the Access Management Program Coordinator.

5.1.1.3. Where to Use Access Management

Access Management can be used on any roadway. In some cases, such as State Highways, access management is a requirement. Access management can be used as an inexpensive way to improve performance on a major roadway that is increasing in volume. Access management should be used on new roadways and roadways that are to be improved so as to prolong the usefulness of the roadway.

5.1.2. Context Sensitive Solutions

Context Sensitive Solutions (CSS) addresses the need, purpose, safety and service of a transportation project, as well as the protection of scenic, aesthetic, historic, environmental and other community values. CSS is an approach to transportation solutions that find, recognize and incorporate issues/factors that are part of the larger context such as the physical, social, economic, political and cultural impacts. When this approach is used in a project the project become better for all of the entities involved.

5.1.3. Recommended Roadway Cross Sections

Cross sections are the combination of the individual design elements that constitute the design of the roadway. Cross section elements include the pavement surface for driving and parking lanes, curb and gutter, sidewalks and additional buffer/landscape areas. Right-of-way is the total land area needed to provide for the cross section elements.

The design of the individual roadway elements depends on the intended use of the facility. Roads with higher design volumes and speeds need more travel lanes and wider right-of-way than low volume, low speed roads. The high use roadway type should include wider shoulders and medians, separate turn lanes, dedicated bicycle lanes, elimination of on street parking, and control of driveway access.

For most roadways, an additional buffer area is provided beyond the curb line. This buffer area accommodates the sidewalk area, landscaping, and local utilities. Locating the utilities outside the traveled way minimizes traffic disruption in utility repairs or changes in service are needed.

Federal Highway standard widths apply on the all roads that are part of the state highway system. Also, all federally funded roadways in Wendover and Toeele County must adhere to the same standards for widths and design.

5.2. Bicycles and Pedestrians

5.2.1. Bicycles/Trails

Bicycles are allowed on all roadways, except where legally prohibited, and as such should be a consideration on all roads that are being designed and constructed, and as roadway improvements are taking place. To increase the level of interest in bicycling in Wendover, as growth occurs developers should be encouraged to include separate bicycle/pedestrian pathways in new developments. Opportunities to increase shoulder width in conjunction with a roadway project should be taken whenever technically, environmentally, and financially feasible. Wendover is encouraged to follow their desire as noted in Chapter 2 of this Plan and pursue the creation of a Trails Master Plan. When a plan is developed, it will be important to note that regardless of the trails system's function, as all bike/trail facilities are planned, designed and

constructed, review of the connectivity of the trails system is critical. With input from the community, a review of the connectivity of the trails should play an integral role in the decision making process for potential projects. In order to enhance the quality of life for those in the community, the trails should be accessible to all users and incorporate ADA requirements.

The trails, when constructed, may have slight variances in application type due to possible differences in the terrain at a specific trail location or differing user needs. However, regardless of the design type, the applicable design standards found in the latest version of the AASHTO Guide for the Development of Bicycle Facilities should be followed, as well as the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for appropriate signage of the trails system.

5.2.2 Pedestrians

Every effort should be made to accommodate pedestrians in Wendover. As referenced in Chapter 2 of this Plan, there is a lack of sidewalks throughout. An opportunity to include accessible sidewalks, while adhering to ADA requirements, during construction of other projects is encouraged. When constructing a sidewalk, for the safety and convenience of pedestrian traffic, sidewalk placement should be free from debris and obstructions or impediments such as utility poles, trees, bushes, etc. As growth continues in the area, Wendover should require developers to include sidewalk placement in their project plans. The interconnectedness of the Town's sidewalk system should be considered as development takes place.

Sidewalks in residential areas should be at least 5-feet wide whenever adequate right-of-way can be secured. This will provide sufficient room and a level of comfort to persons walking in pairs or passing and will specifically allow for persons with strollers or in wheelchairs to pass. On major roadways, sidewalks at least 6-feet wide and with a 6 to 10-foot park strip are desirable. In pedestrian-focused areas, such as schools, parks, sports venues or theaters, and in hotel and market districts, even wider sidewalks are recommended to accommodate and encourage a higher level of pedestrian activity, especially where tourist use would be expected. To ensure consistency of sidewalks throughout the area, UDOT's approved standard for sidewalks should be followed.

There may be opportunity for Wendover City to begin a sidewalk placement plan through the Utah Department of Transportation's Safe Sidewalk Program, available through the Traffic and Safety Division. The City should contact UDOT's Region 2 office in Salt Lake City for application requirements.

If schools are to be constructed within Wendover, awareness of the requirement to develop a routing plan in cooperation with

the area school is paramount. The routing plan is to be reviewed and updated annually. Information regarding the Safe Routes to School program is available by contacting the Utah Department of Transportation's Traffic and Safety Division.

5.3. Enhancement Program

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created the Transportation Enhancement program. The program has since been reauthorized in subsequent bills (i.e. TEA-21). The Transportation Enhancement program provides opportunities to use federal dollars to enhance the cultural and environmental value of the transportation system. These transportation enhancements are defined as follows by SAFETEA-LU:

The term 'transportation enhancement activities' means, with respect to any project or the area to be served by the project, any of the following activities if such activity relates to surface transportation: provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists, acquisition of scenic easements and scenic or historic sites, scenic of historic highway programs (including the provision of tourist and welcome center facilities), landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conservation and use thereof for pedestrian or bicycle trails), control and removal of outdoor advertising, archeological planning and research, environmental mitigation to address water pollution due to highway runoff or reduce vehicle caused wildlife mortality while maintaining habitat connectivity, and establishment of transportation museums.

The Utah Transportation Commission, with the help of an advisory committee, decides which projects will be programmed and placed on the Statewide Transportation Improvement Program (STIP). Applications are accepted in an annual cycle for the limited funds available to UDOT for such projects. Information and Applications for the current cycle can be found on UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select "Planning and Programming", here you will find a sub-topic entitled "Transportation Enhancement Program". The UDOT Program Development Office, on or before the specified date to be considered, must receive applications. Projects will compete on a statewide basis.

5.4. Transportation Corridor Preservation

Transportation Corridor Preservation will be introduced as a method of helping Wendover's Community Transportation Plan. This section will define what Corridor Preservation is and ways to use it to help

the Community Transportation Plan succeed for the Town.

5.4.1. Definition

Transportation Corridor Preservation is the reserving of land for use in building roadways that will function now and can be expanded at a later date. It is a planning tool that will reduce future hardships on the public and the town. The land along the corridor is protected for building the roadway and maintaining the right-of-way for future expansion by a variety of methods, some of which will be discussed here.

5.4.2. Corridor Preservation Techniques

There are three main ways that a transportation corridor can be preserved. The three ways are acquisition, police powers, and voluntary agreements and government inducements. Under each of these are many sub-categories. The main methods will be discussed here, with a listing of some of the sub-categories.

5.4.2.1. Acquisition

One way to preserve a transportation corridor is to acquire the property outright. The property acquired can be developed or undeveloped. When the town is able to acquire undeveloped property, the town has the ability to build without greatly impacting the public. On the other hand, acquiring developed land can be very expensive and can create a negative image for the Town. Acquisition of land should be the last resort in any of the cases for Transportation Corridor Preservation. The following is a list of some ways that land can be acquired.

- Development Easements
- Public Land Exchanges
- Private Land Trusts
- Advance Purchase and Eminent Domain
- Hardship Acquisition
- Purchase Options

5.4.2.2. Exercise of Police Powers

Police powers are those ordinances that are enacted by a municipality in order to control some of the aspects of the community. There are ordinances that can be helpful in preserving corridors for the Community Transportation Plan. Many of the ordinances that can be used for corridor preservation are for future developments in the community. These can be controversial, but can be initially less intrusive.

- Impact Fees and Exactions
- Setback Ordinances
- Official Maps or Maps of Reservation
- Adequate Public Facilities and Concurrency Requirements

5.4.2.3. Voluntary Agreements and Governmental Inducements

Voluntary agreements and governmental inducements rely on the good will of both the developers and the municipality. Many times it is a give and take situation where

both parties could benefit in the end. The developer will likely have a better-developed area and the municipality will be able to preserve the corridor for transportation in and around the development. Listed below are some of the voluntary agreements and governmental inducements that can be used in order to preserve transportation corridors in the city limits.

- Voluntary Platting
- Transfer of Development Rights
- Tax Abatement
- Agricultural Zoning

Each of these methods has its place, but there is an order that any government should try to use. Voluntary agreements and government inducements should be used, if possible, before any police powers are used. Police powers should be tried before acquisition is sought. UDOT has developed a toolkit to aid in corridor preservation techniques. This toolkit contains references to Utah code and examples of how the techniques have been used in the past.

5.5. Other Relevant Data

(On the following pages)

5.5.1. Zoning Map

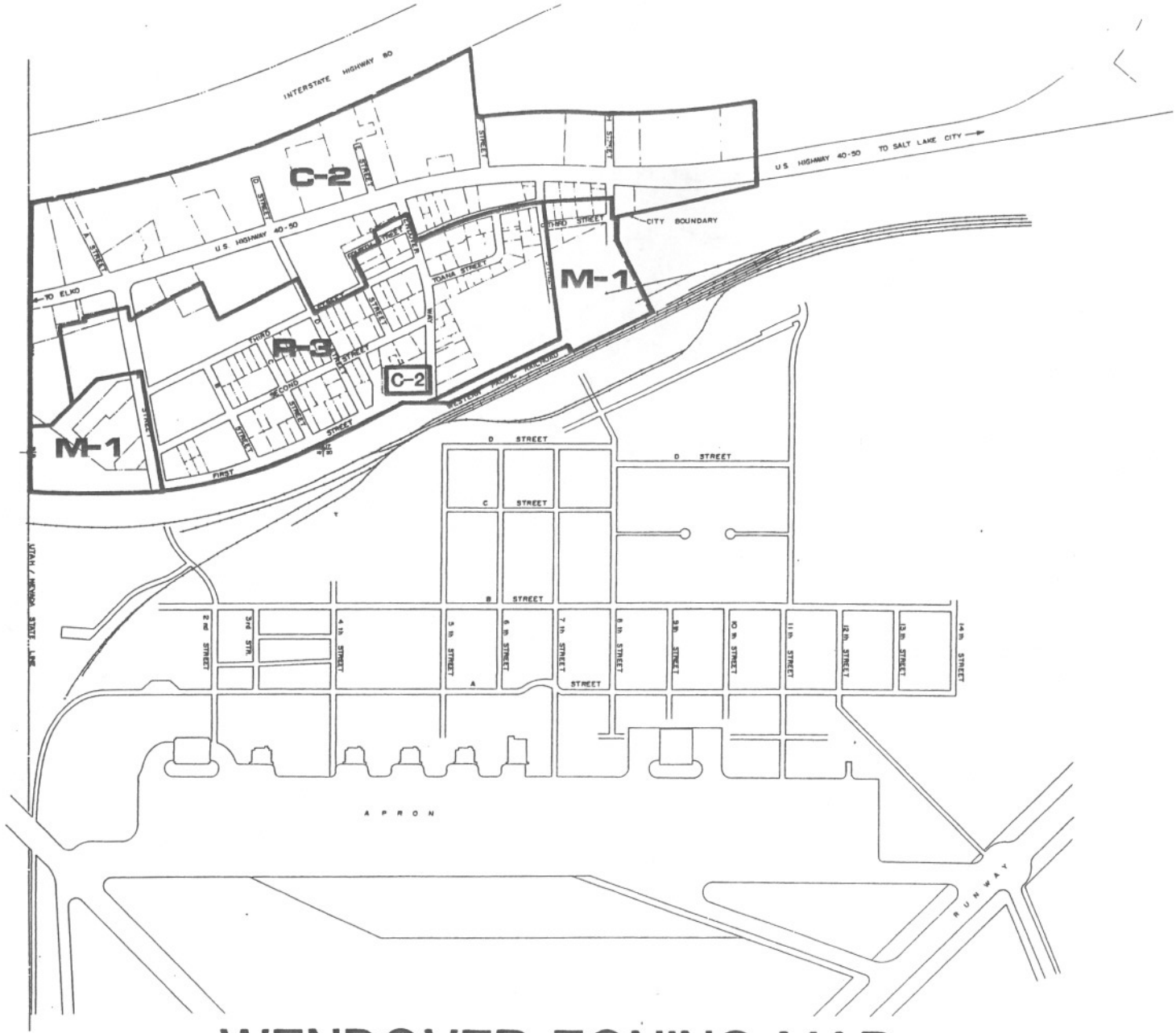
5.5.2. Travel Forecast Sheets

5.5.3. Suggested types of street cross-sections

Wendover Community Transportation Plan Issues List and Cost Estimates

Location Description	Description of Issue or concern	Issue Category	Possible Action	Planning Level Cost Estimate
Northern Access (New Road east of I-80)	2nd access to city from subdivision to north	Roadway	New Road & structure(s) @ I-80	$12,000,000
I-80 & Aria Blvd.	New Interchange (Includes Drainage & sidewalks)	Roadway	New Interchange	Privately Financed
SR-58 (Main) & Aria Blvd / 1st St.	Re-align offset intersection	Roadway	Road Reconstruction	Privately Financed
Pequop: 1st Street to 2nd Street	Re-align Pequop (RxR Property)	Roadway	Road Reconstruction	$175,000
1st Street: Pequop to SR-58 (Main)	Install curb / gutter & sidewalk	Roadway	Curb & Gutter Project	$120,000
Airport Way: State Line to Industrial Park	Reconstruction of Roadway	Roadway	Road Reconstruction	$1,700,000
Pequop & 6th Street	Re-alignment of road	Roadway	Road Reconstruction	$50,000
Pequop: 1st Street to 8th Street	Fix Drainage problems south side of road	Roadway	Drainage Project	$300,000
Citywide	Costs to Re-pave City Streets (2 miles)	Roadway	Paving Project ($120/lf)	$1,267,200
Citywide	Costs to Install curb / gutter & sidewalk (2 miles)	Roadway	Curb & Gutter Project ($100/lf)	$1,056,000
SR-58 (Main) & Aria Blvd / 1st St.	Future Signal with new interchange	Traffic	Signal Study	$5,000
SR-58 (Main) & Aria Blvd / 1st St.	Future Signal with new interchange	Traffic	Signal Project	$250,000
SR-58 (Main) to I-80 East of Town	Study to Evaluate Lighting Needs	Safety	Lighting Study	$50,000
SR-58 (Main): State Line to I-80 East of Town	Additional Street Lighting	Safety	Lighting Project	$350,000
1st Street & Pequop (Near UPRR ROW)	Drainage Outflow (Drainage water dead ends here)	Roadway	Drainage Project	$300,000
SR-58 (Main): Two Locations 650 S & 800 S	Drainage flows into private property (2 locations)	Roadway	Drainage Project	$300,000
SR-58: Approx. 620 S (Tow Truck Co)	Pavement Crown and access problems (cars scrape)	Safety	Spot Improvement Project ?	$300,000
Citywide	Review Existing Drainage Plan	Roadway	Drainage Study	$30,000
Citywide	Alignment Survey of South 1st Street	Roadway	Other Study	$15,000
Citywide	Bike / Ped Trail Study	Bike / Ped	Pedestrian Study	$50,000
Citywide	ATV Trail Study	Bike / Ped	Trail Study	$50,000
SR-58 (Main): State Line to 9th Street	Review Crosswalk Striping	Bike / Ped	Crosswalk Study	$5,000
Citywide	Establish future Amtrak Stop / Shuttle Bus to SLC	Transit	Transit Feasibility Study	$50,000
Citywide	Welcome to Wendover Gateway	Enhancement	Enhancement Project	$200,000

Total **$18,623,200**



WENDOVER ZONING MAP

SE MAPS AND UTILITY DATA
VIDED BY NIELSEN, MAXWELL & WANGSGARD

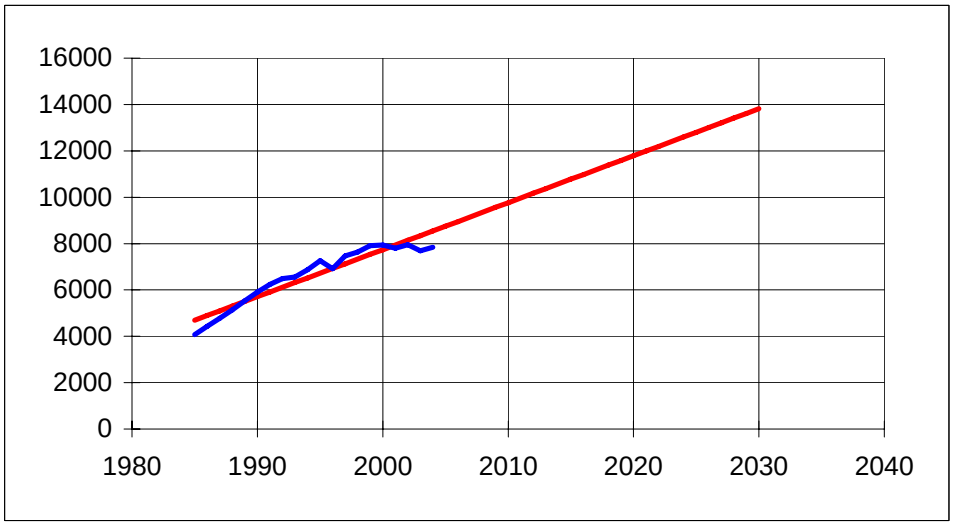
Route	*I-80*
Limits	*Wendover, Utah*
	East of Utah interchange

Year	AADT	Forecast
1985	4,075	4695
1986	4,425	4898
1987	4,775	5101
1988	5,140	5303
1989	5,530	5506
1990	5,915	5709
1991	6,235	5911
1992	6,495	6114
1993	6,560	6317
1994	6,870	6519
1995	7,265	6722
1996	6,920	6925
1997	7,465	7128
1998	7,630	7330
1999	7,912	7533
2000	7,935	7736
2001	7,795	7938
2002	7,950	8141
2003	7,690	8344
2004	7,835	8547
2005		8749
2006		8952
2007		9155
2008		9357
2009		9560
2010		9763
2011		9966
2012		10168
2013		10371
2014		10574
2015		10776
2016		10979
2017		11182
2018		11385
2019		11587
2020		11790
2021		11993
2022		12195
2023		12398
2024		12601
2025		12803
2026		13006
2027		13209
2028		13412
2029		13614
2030		13817

11% Trucks

Projection based on 1985 to 2004 data

2.6% growth rate → 203 vehicles/year



Notes

8/17/2006

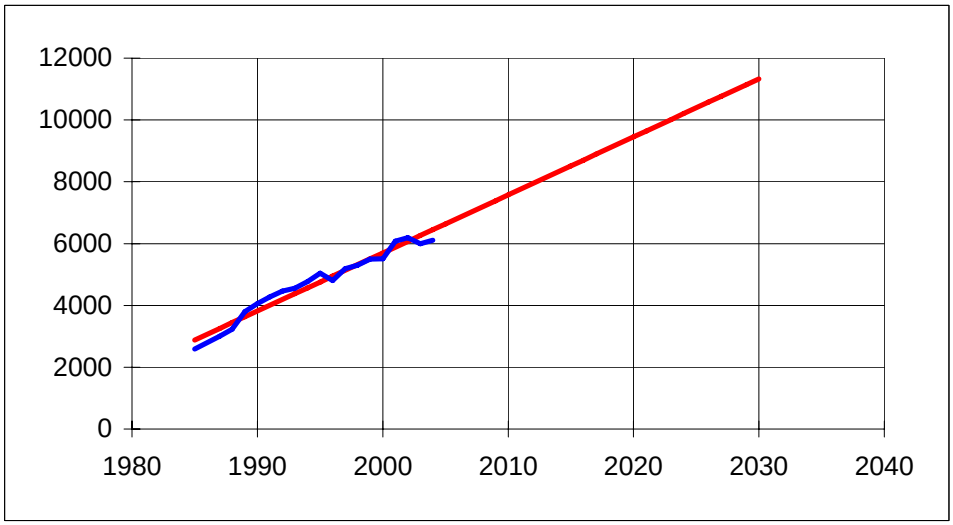
Route	*I-80*
Limits	*Wendover, Utah*
	Nevada State Line

Year	AADT	Forecast
1985	2,590	2879
1986	2,795	3067
1987	3,000	3255
1988	3,230	3443
1989	3,800	3630
1990	4,060	3818
1991	4,280	4006
1992	4,465	4194
1993	4,555	4382
1994	4,770	4569
1995	5,045	4757
1996	4,805	4945
1997	5,185	5133
1998	5,300	5321
1999	5,496	5509
2000	5,510	5696
2001	6,081	5884
2002	6,196	6072
2003	5,995	6260
2004	6,110	6448
2005		6635
2006		6823
2007		7011
2008		7199
2009		7387
2010		7574
2011		7762
2012		7950
2013		8138
2014		8326
2015		8513
2016		8701
2017		8889
2018		9077
2019		9265
2020		9452
2021		9640
2022		9828
2023		10016
2024		10204
2025		10391
2026		10579
2027		10767
2028		10955
2029		11143
2030		11331

11% Trucks

Projection based on 1985 to 2004 data

3.2% growth rate → 188 vehicles/year



Notes

8/17/2006

Route *SR-58*

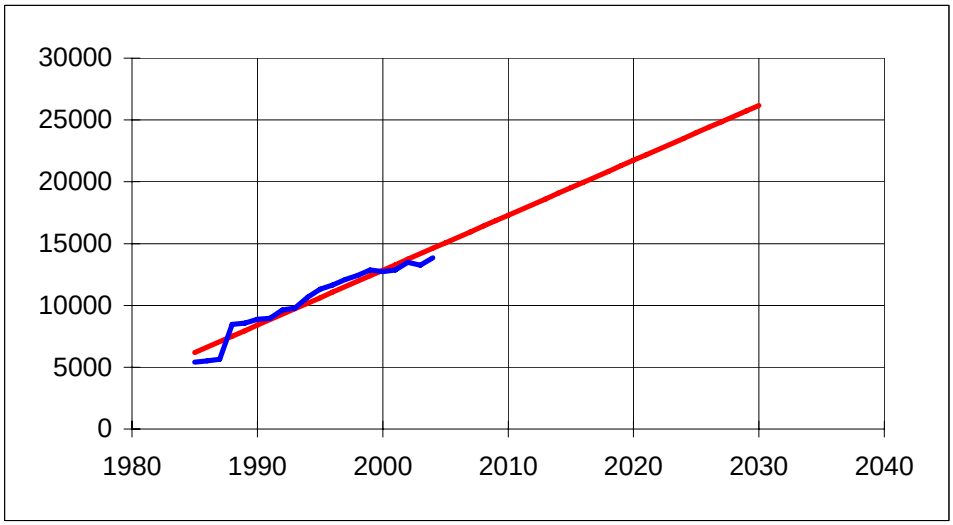
Limits *Wendover, Utah*

Year	AADT	Forecast
1985	5,410	6178
1986	5,520	6622
1987	5,630	7067
1988	8,460	7511
1989	8,580	7956
1990	8,880	8400
1991	8,945	8845
1992	9,625	9289
1993	9,775	9734
1994	10,665	10178
1995	11,310	10623
1996	11,640	11067
1997	12,100	11512
1998	12,425	11956
1999	12,870	12401
2000	12,741	12845
2001	12,860	13290
2002	13,485	13734
2003	13,245	14178
2004	13,840	14623
2005		15067
2006		15512
2007		15956
2008		16401
2009		16845
2010		17290
2011		17734
2012		18179
2013		18623
2014		19068
2015		19512
2016		19957
2017		20401
2018		20846
2019		21290
2020		21735
2021		22179
2022		22624
2023		23068
2024		23513
2025		23957
2026		24402
2027		24846
2028		25291
2029		25735
2030		26180

11% Trucks

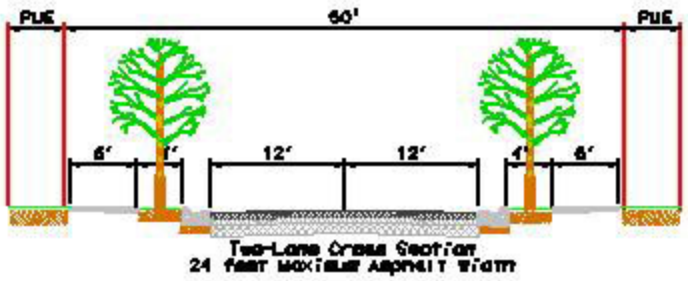
Projection based on 1985 to 2004 data

3.3% growth rate → 444 vehicles/year

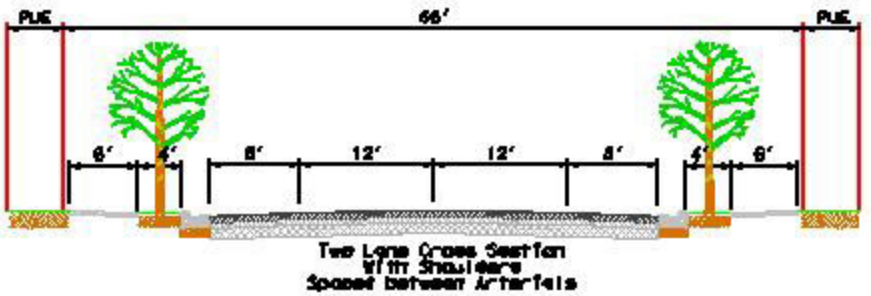


Notes

8/17/2006

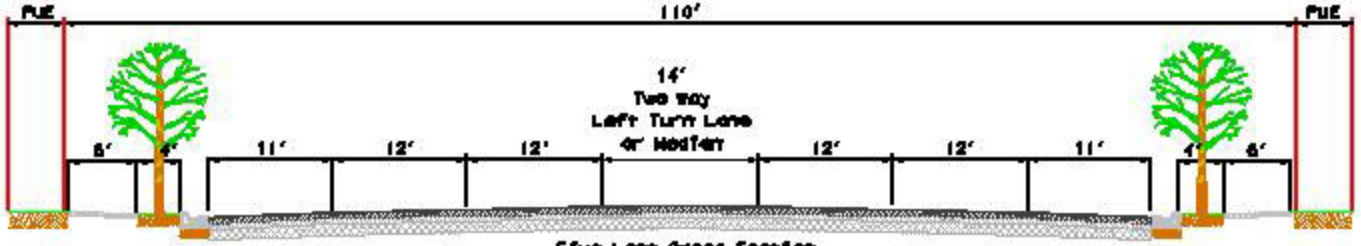


Two-Lane Cross Section
24 feet Maximum Asphalt Width



Two Lane Cross Section
With Shoulders
Spaced between Arterials

Three Lane Cross Section
With Shoulder
Spaced between Arterials



Five Lane Cross Section
With Sholders
Minimum spacing approximately ¼ mile

Notes:

1. Sidewalk Dimension varies from 4' to 6' (See UDOT Std Dwg 08 II Note 3)
2. Public Utility Easement (PUE) dimension varies from 2.5' to 12' Typical
3. Shoulder Dimensions:
   on 80' ROW - varies from 8' to 12'
   on 110' ROW - varies from 10' to 12'
   See AASHTO A Policy on Geometric Design of Highways and Streets

10 5 0 10 20 30

Scale in Feet

Suggested Typical Cross Section

Revised: September 16, 2004